Application No.: 10/632,803 Docket No.: 01-VE22.40 CON1
Customer Number 32127

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of controlling a telecommunications network comprising the steps of:

recognizing a condition;

initiating a first call in response to recognizing the condition, including transmitting a first call set-up message indicating a first special calling party number;

detecting a ~~an AIN~~ trigger when said first call reaches a switching point in the telecommunications network;

in response to detecting the trigger, transmitting a first query message to a control point in the telecommunications network, said first query message including said special calling party number;

receiving said first query message at said control point; and

storing~~, in response to said special calling party number,~~ an indicator of said condition in response to receiving said first special calling party number.

2. (Currently Amended) The method of claim 1 further comprising the steps of:

recognizing a change of said condition;

initiating a second call in response to recognizing the change of said condition, including transmitting a second call set-up message indicating a second ~~another~~ special calling party number;

detecting a ~~an AIN~~ trigger when said second ~~other~~ call reaches a switching point in the telecommunications network;

transmitting a second ~~another~~ query message including said second ~~other~~ special calling party number;

receiving said second ~~other~~ query message including said second ~~other~~ special calling party number; and

updating said indicator of said condition in response to receiving said second ~~other~~ special calling party number.

Application No.: 10/632,803 Docket No.: 01-VE22.40 CON1
Customer Number 32127

3. (Currently Amended) The method of claim 2 wherein said first and second special party numbers are different invalid calling party numbers.

4. (Original) The method of claim 2 wherein said step of updating said indicator includes a step of updating said indicator to a status existing prior to said step of storing.

5. (Currently Amended) The method of claim 1 wherein said step of recognizing the a condition includes a step of determining a status associated with a subscriber telephone number and said step of initiating a first call includes a step of calling said subscriber telephone number.

6. (Currently Amended) The method of claim 1 wherein said step of detecting a ~~an AIN~~ trigger is performed at a terminating switch serving a subscriber telephone line.

7. (Previously Presented) The method of claim 6 wherein said step of initiating said first call includes calling a telephone number of said subscriber telephone line.

8. (Currently Amended) The method of claim 1 wherein said step of storing an indicator of said condition in response to receiving said first special calling party number includes a step of setting a flag as part of a call processing record of an associated subscriber.

9. (Original) The method of claim 1 further comprising a step of transmitting a disconnect request.

10. (Currently Amended) A telecommunications system comprising:

a switched telephone network including a plurality of ~~a service~~ switching points ~~(SSPs)~~ ~~(i)~~ interconnected by a plurality of communication links, and further including a number of subscriber lines associated with respective subscribers ~~trunks for carrying customer traffic and (ii) connected to a private operations data network for communicating control messages~~;

a database connected to the switched telephone network, the database storing call processing records associated with respective subscribers of said switched telephone network;[[,]]

a server configured to detect a condition of a subscriber line associated with one of the respective subscribers and, in response to detecting the condition, initiate a call to the subscriber line including a call set-up message indicating a special calling party number;

wherein said switching points are configured to receive the call set-up message and transmit a query message to said database in response to receiving said call set-up message, the query message including the special calling party number, and wherein said database is configured to receive said ~~responsive to a special calling party number contained in a~~ query message ~~generated by one of said SSPs in response to a call to one of said subscribers~~ and to set a service status flag of a call processing record associated with said subscriber line in response to receiving the special calling party number ~~one of said subscribers~~.

11. (Canceled)

12. (Currently Amended) The telecommunications system of claim 10 further comprising a server configured to detect a condition associated with said one subscriber and, in response, initiate said call to said one subscriber including said special calling party number, wherein said special calling party number is being an invalid telephone number indicative of said condition.

13. (Original) The telecommunications system of claim 10 wherein said service status flag is also associated with said one subscriber.

14. (Canceled)

15. (Currently Amended) The telecommunications system of claim 10 wherein said switching points are ~~an SSP serving said one subscriber is~~ configured to selectively route an incoming call in response to a message from said database, said message reflecting a status of said service status flag.

16. (Currently Amended) The telecommunications system of claim 10 wherein said database comprises a Service Control Point (SCP) ~~service control point connected to said private operations data network~~, and said plurality of switching points comprise a plurality of Service Switching Points (SSPs).

17. (Canceled)

18. (Currently Amended) A switched telephone network comprising:

~~(i)~~ a plurality of a Service Switching Points ~~service switching points~~ (SSPs) configurable to provision triggers associated with telephone lines of designated ones of subscribers served by respective ones of said SSPs ~~and responsive to incoming calls to respective ones of said designated subscribers to initiate a query message including a special calling party number associated with one of said incoming calls~~;

a system configured to detect a condition associated with one of the telephone lines of one of the designated subscribers of the telephone network and, in response to said condition, initiate a call to said telephone line using an ISDN User Part (ISUP) call set-up message including a special calling party number;

~~(ii) a plurality of trunks for carrying customer traffic between said SSPs;~~

~~(iii) at least one signaling transfer point (STP) connected to receive said query message from said SSPs;~~

~~(iv) a private operations data network connecting said SSPs to said at least one signaling transfer point (STP); and~~

~~(v)~~ a service control point (SCP) connected to said plurality of SSPs and configured to ~~at least one STP for receiving said query message and storing~~ store service status indicators associated with each of said designated subscribers ~~and responsive to said special calling party number to set one of said service status indicators associated with one of said designated subscribers, said SCP responsive to said service status indicators for supplying call handling instructions in response to a subsequent query message from said SSPs;~~

wherein said plurality of SSPs are further configured to receive the ISUP call set-up message including the special calling party number and, in response, transmit a TCAP query message including the special calling party number to the SCP, and wherein the SCP is configured to receive the query message, modify the service status indicator associated with the one of the designated subscribers based on the special calling party number, and supply call handling instructions based on the service status indicator associated with the one of the designated subscribers for subsequent calls to said telephone line.

19. (Previously Presented) The telecommunications system of claim 18 wherein said special party numbers are different invalid calling party numbers associated with respective conditions to be reflected by said service status indicators.

20. (Currently Amended) A method of processing ~~an incoming call from a calling party~~ calls to a telephone line serving a called party, comprising the steps of:

identifying a connection status of said telephone line of said called party; ~~to a data network including~~

determining whether the connection status indicates a busy condition of the telephone line;

in response to determining a busy condition –

(a) initiating a first call to said called party using a call set-up message indicating a special calling party number,

(b) ~~initiating~~ transmitting a first query message to a remote control point, said first query message including said special calling party number, and

(c) in response to receiving said special calling party number at the remote control point, setting a status indicator of said telephone line at said remote control point; [[and]]

receiving a request for a second call to the telephone line, the second call from a calling party;

initiating the second call using a second call set-up message indicating a calling party number associated with the calling party; and

transmitting a second query message to the remote control point, said second query message including the calling party number associated with the calling party.

~~processing the incoming call in response to said status indicator.~~

21. (Currently Amended) The method of claim 1 wherein said ~~step of transmitting a~~ first call set-up message ~~includes transmitting~~ comprises an ISDN User Part (ISUP) message ~~to a Service Switching Point (SSP) serving a subscriber telephone number wherein said step of initiating said call includes a step of calling said subscriber telephone number~~.

22. (Currently Amended) The method of claim 21 wherein:

said step of transmitting a first query message includes transmitting a Transaction Capabilities Application Part (TCAP) message from said switching point [[SSP]] to the control point;

the control point comprises a Service Control Point (SCP); and

~~said step of receiving includes receiving said TCAP message at said SCP,~~

said first special calling party number is transmitted in a calling party identification portion of said TCAP message, said first special calling party number recognized as an invalid telephone number.

23. (Currently Amended) The method of claim 21 further comprising a step of processing, in response to said indicator, a subsequent third ~~second~~ call initiated to the same telephone number as said first call.

24. (Currently Amended) The method of claim 20 wherein said step of initiating a first call to said called party includes transmitting an ISDN User Part (ISUP) message to a Service Switching Point (SSP) serving said called party.

25. (Currently Amended) The method of claim 24 wherein:

said step of transmitting a first query message includes transmitting a Transaction Capabilities Application Part (TCAP) message from said SSP to the remote control point;